

Chico

**Golden
Empire
Amateur
Radio
Society, Inc.**

www.gearsw6rhc.org

"Dedicated to Public Service"

THE RADIATOR

W6RHC
IRLP #8170

P.O.Box 202 Chico, CA 95927

November 2020 Newsletter

GEARS Founded August 13, 1939

We will hold the November GEARS and board meeting online by Zoom. Watch your email for a link and phone number. We look forward to face to face meetings again when it's safe to do so.

It's time to nominate new officers for GEARS next year. If you would like to serve as an officer or on our Board of Directors, please let me know.

Tom Rider W6JS is offering VEC testing at an outdoor location, call him for an appointment 514-9211.

The FCC is proposing a rate increase in license fees to \$50 for renewal and new licenses. ARRL urges amateur operators to join in strongly opposing FCC's increase in fees. File comments on MD Docket 20-270 using the FCC's Electronic Comment Filing System. <https://www.fcc.gov/ecfs/filings/express> Please post comments before November 16. For more information see the ARRL guide to comments: <http://www.arrl.org/arrl-guide-to-filing-comments-with-fcc>



Sad news, Alan Padgett N6RNP became a silent key this past week according to Gene Wright.

November birthday wishes to Vince Erickson KN6JFG, Mark Forwalter KN6JAA and Harlan Goodsel W7LTH.

Please try to participate in the local nets, while we can't meet in person, at least we can get together by radio.

'73
Jim Matthews K6EST
jiminchico@yahoo.com
530-893-3314



Join GEARS on Facebook
www.facebook.com For timely
news and additional information.

November 2020 Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 8pm OARS Net	2 7pm GARS Net 8pm ARES Net	3 7:30pm GEARS Net	4	5 7pm PARS Net 7:30pm Simplex Net	6	7
8 8pm OARS Net	9 7pm GARS Net 8pm ARES Net	10 7:30pm GEARS Net 7pm ARES meeting	11	12 7pm PARS Net 7:30pm Simplex Net	13 7pm GARS & OARS Meetings	14 GEARS Board Meeting online
15 8pm OARS Net	16 7pm GARS Net 8pm ARES Net	17 7:30pm GEARS Net	18	19 7pm PARS Net 7:30pm Simplex Net	20 7pm GEARS Meeting online	21
22 8pm OARS Net	23 7pm GARS Net 8pm ARES Net	24 7:30pm GEARS Net	25	26 Thanksgiving 7pm PARS Net 7:30pm Simplex Net	27	28 9am OARS Breakfast
29 8pm OARS Net	30 7pm GARS Net 8pm ARES Net					

VEC Testing, FCC License Exam available by appointment. For information or registration call Tom Rider, W6JS 514-9211

Chico Breakfast Canceled until things settle down with the COVID-19 virus.

GEARS Board Meeting 2nd Saturday online.

OARS Meeting Second Friday of the month, TBD (To Be Determined)

GARS Meeting Second Friday of the month, TBD

Butte ARES Meeting 3rd Tuesday, TBD Contact Dale Anderson, KK6EVX 826-3461 for more information.

GEARS Meeting, third Friday of the month, online till further notice pm, meeting at 7:00 pm.

OARS Breakfast 4th Saturday of the month TBD

NETS:

OARS Club Net Sunday 8pm 146.655 Mhz - PL 136.5

GARS Club Net: Monday, 7:00 pm 147.105 MHz + PL 110.09

Butte ARES Net Mondays 8pm 145.290 MHz - PL 110.9

Yuba Sutter Club Net Monday 7pm 146.085 MHz + PL 127.3

GEARS Club Net Tuesdays 7:30 PM 146.850 MHz - PL 110.9

PARS Club Net Thursday 7pm 145.290 - PL 110.9

Simplex Net Thursday 7:30 p.m. 146.52 no tone

Yuba Sutter ARES Net Thursdays 7pm 146.085 MHz + PL 127.3

Sacramento Valley Traffic Net Nightly 9:00 PM 146.850 MHz - PL 110.9

Mt. St. John

Our repeater on Mt. St. John is now back to full service.

You should be able to work the repeater in the valley from a handheld radio.

145.410 Mhz PL is 123.0 Negative offset.

PL both input and output (CTSS)



Baofeng saves the life of ham radio operator

by K0LWC

Ham radio is often portrayed as irrelevant. A dying hobby in the age of the cell phone. Ham radio operators know nothing could be further from the truth. One operator who would be the first to back that up is Alden Summers Jones, KC1JWR, from Vermont.

During the Summer of 2020, Alden decided to take a hike with family on the Long Trail in Vermont. Long Trail is the oldest hiking trail in the United States and crosses the highest peaks in Vermont. Like any smart ham radio operator, Alden made sure to bring his HT on the hike as mountainous regions often lack cell phone coverage.

During the hike, Alden suddenly felt lightheaded, and his heart began racing. Then... nothing. The lights went out as he suffered a seizure from low blood sugar. A local EMT was nearby and rushed to Alden's aid. The EMT pulled out his cell phone but was unable to contact dispatch. There they were, stranded on a mountain with a medical emergency and no cell coverage. Now what?

Ham radio to the rescue Alden, who regained consciousness, reaches into his bag and pulls out the most hated ham radio known to man — his trusty Baofeng. He put out a call on 146.91 (K1FFK) located at 3,500 ft on Mt. Greylock. The 146.91 repeater is one of the widest coverage mountaintop repeaters on the East Coast.

The emergency call was acknowledged by Ron Wonderlick, AG1W. Another ham named Matthew Sacco (KC1JPU) was monitoring the emergency traffic. After a short discussion with Ron, Matthew went mobile and put himself at the emergency responder staging (parking) area where crews would enter the backcountry wilderness.

"As I arrived at the staging point set up by the Fire Department, I met up with Fire Chief Scott Moore (95-C1) of the Wilmington Fire Department, who was Incident Command. I told him how I heard about the incident and offered my services. I then got to work attempting to make contact with Ron over the 91. We were in a bit of a shadow as far as coverage went from the 91, and my first attempt to make contact with my HT was to no avail. I then went to my truck to try my mobile radio, which also failed to open up the repeater. Running out of options, I went into my radio bag and constructed a roll-up J-Pole out of some 450-ohm ladder line, a short length of coax, and male UHF connector. In that bag I keep some basic soldering equipment and a power inverter for the truck. Once it was constructed and tested, I grabbed my fishing pole from the back seat, put a weight on the end, and cast the weight into the highest branch I could find. I tied the J-Pole to the end of the line and reeled it up about 20' into the tree with the help of a barrel connector and about another 24' of coax. I tried that antenna plugged into the back of my mobile radio, and we were up and running! I was then in contact with Net Control!" Matthew Sacco, KC1JPU

With communication established, the next challenge was finding the hiker and choosing the right equipment to get Alden (KC1JWR) off the mountain. Someone on the scene used his cellphone to give Google Maps Plus Code, which first responders converted into a latitude and longitude.

As the rescue team approached Alden's location, they realized getting an ATV to him for evacuation wouldn't be possible. They were going to need a helicopter rescue. The ham radio operators on the K1FFK emergency net passed traffic to notify New York State Search and Rescue. As Alden and others waited hours for search and rescue to arrive, he spent time talking about ham radio.

Another hiker worked to clear an opening for the helicopter to lower its rescue basket. The GPS coordinates are relayed through the ham net to the responding helicopter crew. While the rescuers were talking to the helicopter on their radios, they were having trouble making contact through their rubber duck antennas. So, Alden, who had a better aftermarket antenna for his HT, lent it to the rescuers for better communication.

Alden was first flown to Woodford Mountain for evaluation and treatment and later airlifted to a hospital in Albany, NY. During the flight, Alden again talked to the pilots and the other rescuers about ham radio the value it can have when you need it most.

Neil Van Dyke (N1TNC), the Search & Rescue Coordinator for the Vermont Dept. of Public Safety, was the one who called in Search and Rescue. When asked about the event, Mr. Van Dyke said, "Ham radio was a key part of the incident and played a major role in the rescue".



*Alden being rescued off Long Trail
by New York Search and Rescue*

What can we learn from Alden's story?

So many believe ham radio is no longer needed. We have smartphones, right? The truth is our communications infrastructure is incredibly fragile. It can collapse with a moments notice. Furthermore, even in 2020 cell signals don't cover everywhere.

I lived in Colorado for nearly a decade. I've lost count how many times I would rely on ham radio in the Rocky Mountain back-country for voice or data coverage (APRS) when Verizon and AT&T showed "No Service".

Keep that radio on 146.520 simplex, scan your local repeaters and keep one ear on your radio if you live in remote areas. I would keep my four element vertical yagi pointed at Rocky Mountain National Park during the summer months just in case a tourist needed assistance.

If you're going into remote areas yourself bring a radio and some RF gear with you. Consider building a go-bag with some basic ham radio gear if you're an avid outdoors man.

You never know when amateur radio could make the difference. In fact, Alden said it best, "Ham radio saved my life last night."

J-Pole Antennas

At our last GEARS meeting, we discussed the popular J-Pole 2 meter antenna. This is an antenna you can easily build yourself or purchase one already made. The two most popular designs are the cooper pipe type or the roll-up ones made from 300 ohm twin lead cable. The roll-up ones are often used as emergency or temporary antennas that can easily be hung from a tree while camping.

So how does a J-Pole antenna work? Here is a great video by Dave Casler, KE0OG explaining the physics behind this antenna: <https://youtu.be/GRJw3SCBGfA>

Here are some online resources to help you build one.

Design calculator: <https://www.hamuniverse.com/jpole.html>

Building a copper pipe J-Pole <https://www.513repeater.org/elmering/build-a-jpole-antenna/>

Building a roll up j-pole: <https://www.essexham.co.uk/slim-jim> and <https://www.qsl.net/wb3gck/jpole.htm>

Dual Band J-pole <http://www.w6si.com/blog-008.html>

Emergency J-pole plans: <http://w4ehw.fiu.edu/j-pole.html>

Of course Ed Fong WB6IQN has several designs for a J-Pole you build with 300 ohm twin lead and then mount inside a PVC pipe:

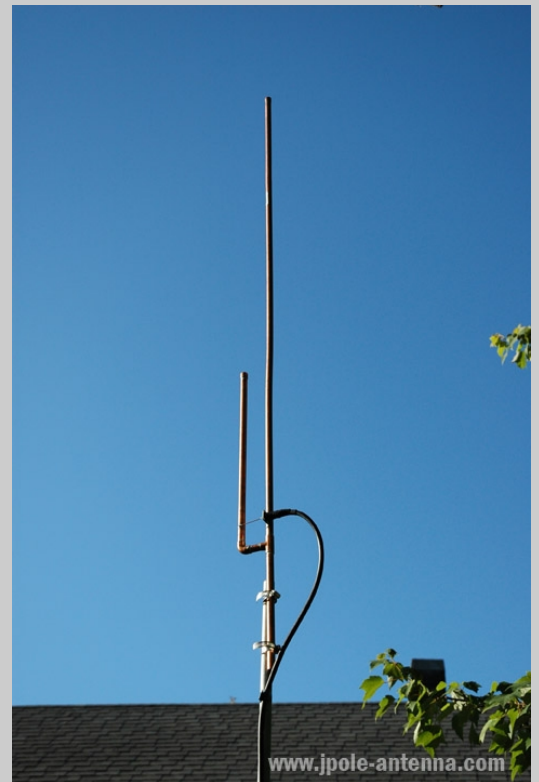
https://edsantennas.weebly.com/uploads/2/9/3/5/29358461/dbj-1_qst.pdf

https://edsantennas.weebly.com/uploads/2/9/3/5/29358461/dbj-2_qst.pdf

<https://edsantennas.weebly.com/uploads/2/9/3/5/29358461/fong-qst-2017-march.pdf>

The thing I love about using 300 ohm twin lead is the simplicity, low cost and ease of building one. Give it a try, it's fun to do new things.

Jim K6EST



It's a Wrap for Hurricane Watch Net, ARES Teams Stand Down

After an activation that lasted more than 9 hours, the Hurricane Watch Net (HWN) suspended operations on October 28 at around 0130 UTC.

"Although Zeta was still a hurricane just east of Hattiesburg, Mississippi, moving to the northeast at about 30 MPH, we hated to close operations, but propagation on 20 and 40 meters was totally gone," HWN Manager Bobby Graves, KB5HAV, said. "The turnout of reporting stations was great, but we can always use more. Meteorologists love weather data. So, we do our best to collect and forward as much as we can."

ARES teams in Louisiana went on standby status on October 27, ready to activate at the request of local emergency management officials or served agencies. At midday on Wednesday, the Louisiana Emergency Net was placed on active standby status on 3.878 and 7.255 MHz, concluding operations at 2100 UTC on Wednesday.

The Northern Florida ARES Net convened October 28 on 3.950 MHz for about 12 hours in anticipation of tropical storm winds and a risk of tornado activity. "Our HF net shut down this morning,"

Northern Florida Section Emergency Coordinator Karl Martin, K4HBN, said. "The counties closed shelters and had their ARES groups stand down soon after." Martin said operators did cover three shelters. "We had challenges due to HF conditions, and one of the ARES groups lost a repeater and had to go to a back-up plan."

In George County, Mississippi, ARES Emergency Coordinator General Dailey, KD4VVZ, suspended routine net traffic to take storm-related reports such as weather data, property damage, and power status. Dailey said repeater net would remain active for 12 hours, and the information would be relayed to weather forecasters. The net prepared to carry occasional digital traffic.

"As the sun comes up, damage assessments are still ongoing," the George County Sheriff's office announced on the George County ARES Facebook page. "Currently a majority of the county is without power." The sheriff reported many downed trees and power lines and advised against nonessential travel.

WX4NHC at the National Hurricane Center (NHC) in Miami activated at 1600 UTC on October 28, monitoring HWN's frequencies of 14.325 and 7.268 MHz as well as the VoIP Hurricane Net (VoIP WX) and other resources. The net funnels "ground truth" reports to NHC forecasters.

Ham Aid emergency communication kits from ARRL had been pre-positioned in Louisiana in preparation for this event.

HWN Manager Graves said, "2020 has been a well above-average season for tropical cyclones" with half of the systems that developed making landfall. "Adding to the pandemic [that] all have had to deal with, we as amateur radio operators, have had to deal with very poor propagation, thanks in part to what has seemed to be a never-ending solar minimum."

Graves said the number of HWN check-ins also is down, a factor he also attributed to less-than-ideal propagation. He said the NHC really depends on the information radio amateurs on his net collect.

He reminded that Hurricane Season doesn't end officially until November 30, but nature doesn't respect the calendar. "Tropical systems can and have formed during every month," he said. "In 2005, Zeta didn't form until the last week of December and lasted into January. Also, we still have many more Greek names to use, but I sure hope we don't have to see one named Eta," which is the next letter in the Greek alphabet.

Source:ARRL





On Saturday Oct 17th GEARS assisted the local Cub Scout troupe #423 with their JOTA or Jamboree-On-The-Air. We set up out at the Chico Elks Lodge and met with about 12 scouts.

At the lodge were Jim Matthews K6EST and Collin Dever KN6LGI. We divided the kids into two groups and they made contacts with Gene Wright WA6ZRT and Stephen McDermott K6AKF both of which were operating from home. Paul Stewart N6PAS and Kent Jorgensen KF6ONI also stopped by to help.

For many of the kids it was their first opportunity to use two-way radio. It seem like everyone enjoyed themselves for a fun morning activity.



Club Officers:

President.....	Jim Matthews, K6EST
Vice-President.....	Kent Hastings, WA6ZFY
Secretary.....	Susan Check, KE6LTY
Treasurer.....	Kathy Favor, K6FAV
Director.....	Dale Anderson, KK6EVX
Director.....	Bennett Laskey, K6CEL
Past President.....	Tom Rider, W6JS
VEC.....	Tom Rider, W6JS



73's Happy Thanksgiving